TV·EARS®

Dr. Recommended TV Listening Devices

TV Ears
2.3 System

User Manual

I 2.3 Headset

1. On / Off and Volume Control
2. Tone Control
3. TV Ears Tips w/ Snap Tip adapters (attached)
4. Faceplate w/ battery (attached)

II 2.3 Transmitter

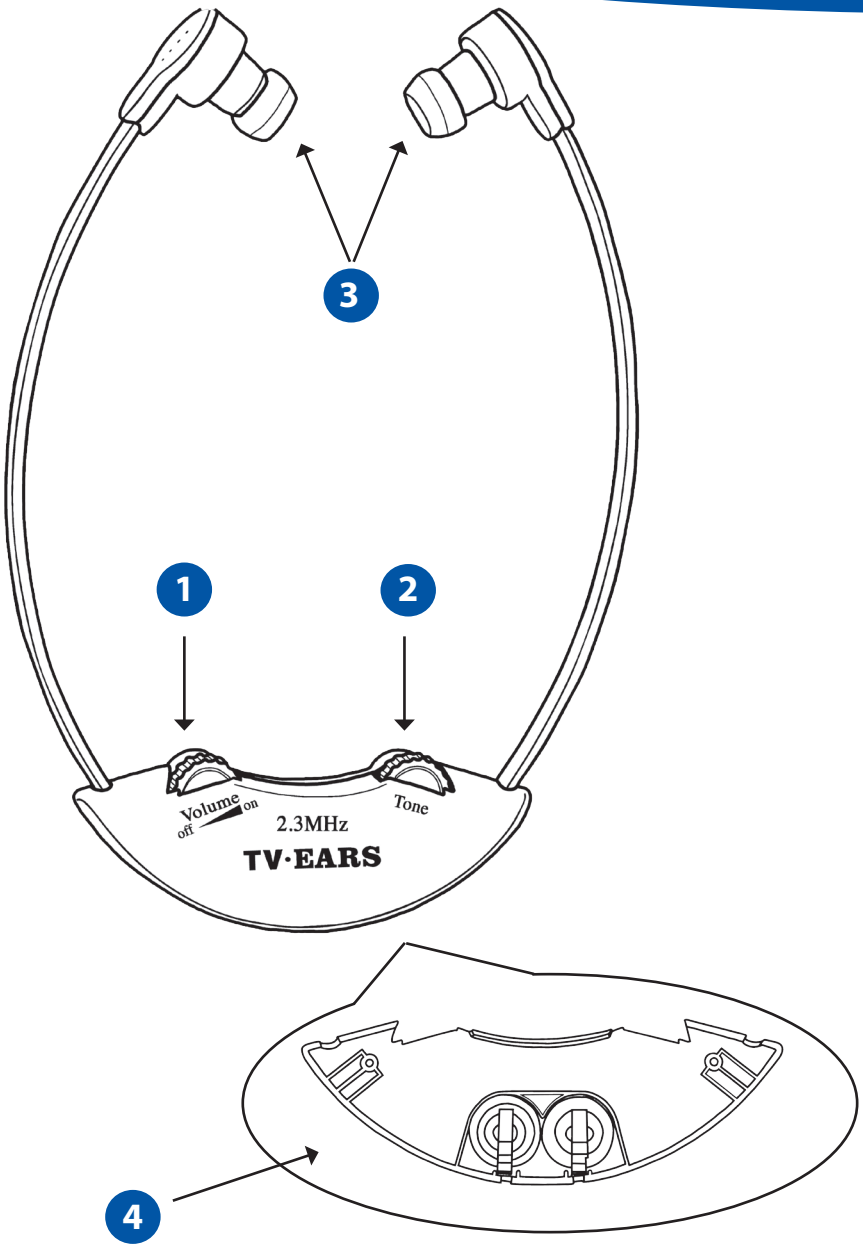
5. Infrared Diodes
6. Charging Indicator Light
7. Charging Cradles
8. Audio Port
9. 12V port

III Installation Guide

10. AC adapter (power supply)
11. Audio Cord

Included in Box:

2.3 Headset
2.3 Transmitter
Faceplate with battery (attached)
AC adapter (power supply)
Audio Cord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1
2
Volume
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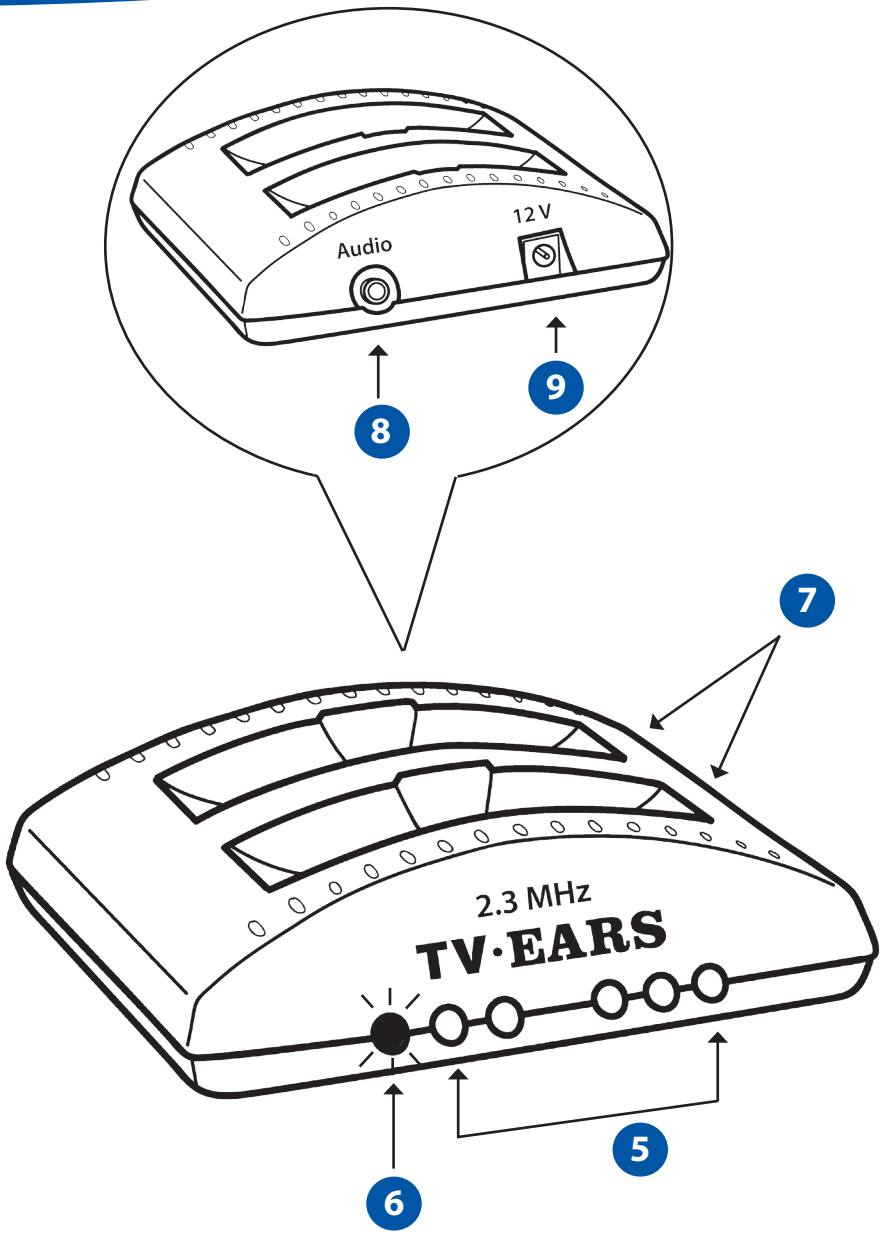
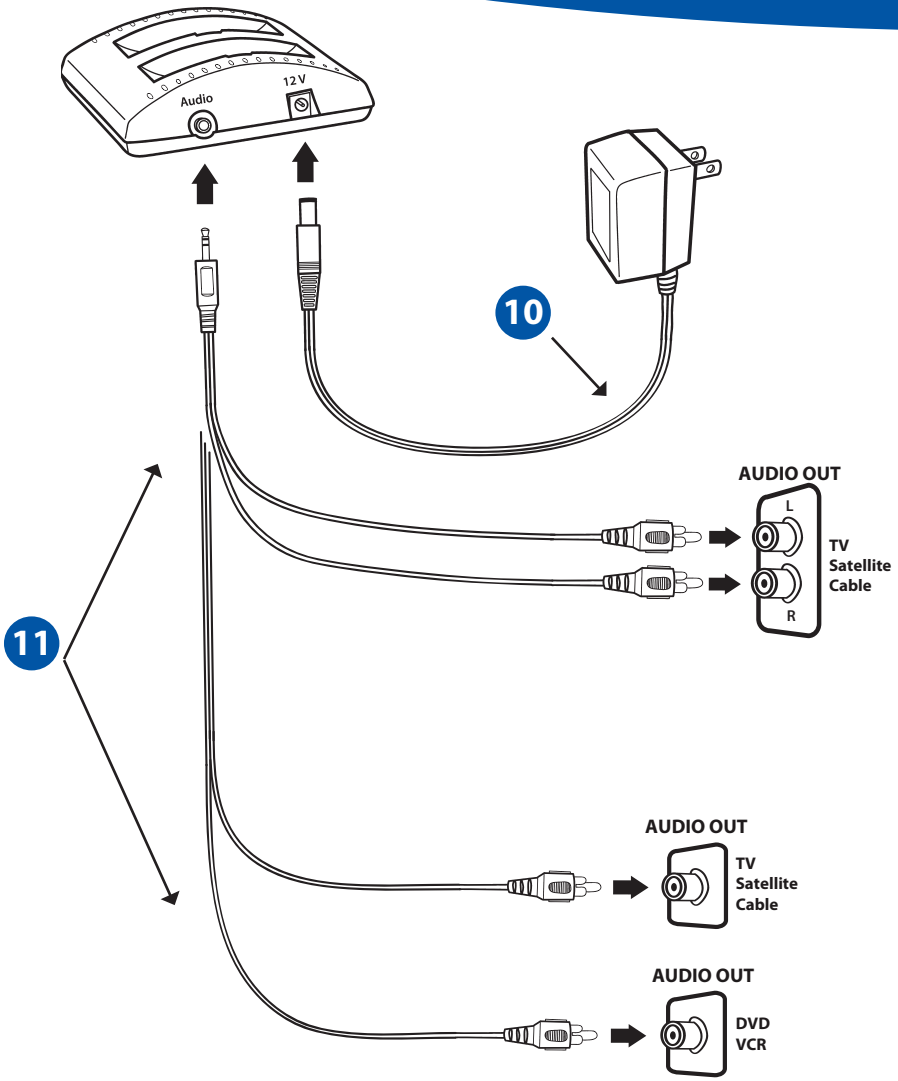
Tone
2.3MHz
TV·EARS
4

II




Audio
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AUDIO OUT
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AUDIO OUT
TV
Satellite
Cable
AUDIO OUT
DVD
VCR

ENGLISH

TV Ears 2.3 System User Manual

Congratulations!
You've taken the first step toward the TV Ears television experience. The TV Ears 2.3 System will help you hear TV better at your own volume. To ensure the best TV listening experience please read this manual thoroughly.

TV Ears Customer Service
Please feel free to contact us with any questions, concerns, or problems about your TV Ears product.

- **Call:**
  US: 1-866-611-9934
  US Corporate Office Toll Free: 1-888-883-3277
  Monday – Friday 7 AM – 4 PM PST
  Canada: 1-800-263-4864
  European: 00353-61-77-0807
  UK: 0844-202-4000
- **Visit www.tvears.com**

Lifetime Service Guarantee
Your new TV Ears 2.3 Wireless Headset system comes with a **Lifetime Service Guarantee**. The Lifetime Service Guarantee ensures TV Ears, Inc. will provide repairs and replacements at a nominal fee (plus shipping) after the limited warranty has expired. Refer to the **limited warranty** for full terms.

30-day Money Back Guarantee
TV Ears, Inc. honors a **30-day money back guarantee** for all TV Ears products purchased through TV Ears. If for some reason you are not fully satisfied within 30-days of the purchase date, please call one of the customer service numbers listed above. We will issue a Return Merchandise Authorization (RMA) number. All returns must have an RMA number.

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ENGLISH

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Important Safety Instructions

1. Read all instructions completely and heed all warnings. Install in accordance with TV Ears, Inc.'s instructions.
2. Keep these instructions in a safe place for future reference.
3. Do not use or submerge TV Ears products near water, moisture, or other liquids.
4. Clean with a dry cloth.
5. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
6. For safety purposes, do not deface the prongs on the AC adapters. If the provided plug does not fit into your outlet, purchase the correct adapter or consult an electrician for replacement of the obsolete outlet.
7. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where the cord exits from the transmitter.
8. TV Ears recommends using a surge protector to protect your TV Ears from power surges.
9. Only use attachments and accessories specified by TV Ears, Inc. with your TV Ears system.
10. Refer all servicing to qualified service personnel. Servicing is required when the TV Ears product has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the TV Ears product, the TV Ears product has been exposed to rain or moisture, does not operate normally, or has been dropped, cracked, or broken.

WARNINGS

Warning: To reduce the risk of fire or electric shock, do not expose the TV Ears product to rain or moisture. The TV Ears product should not be exposed to dripping or splashing liquids. Do not place objects filled with liquid such as vases on or near the TV Ears product.

Warning: Keep batteries out of reach of children. Discard the battery faceplate (leave batteries installed in faceplate) appropriately and carefully. If swallowed, call:

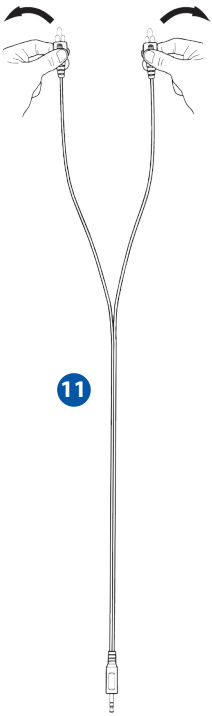
The National Button Battery Ingestion Hotline: 202-625-3333.

Warning: The magnetic field emitted by the TV Ears ear tip speakers is minimal. When used as indicated, TV Ears headsets should not cause magnetic interference with pacemakers or internal defibrillators. The magnetic field strength of the speakers is less than 1 Gauss when within 1 inch (3 cm) of the pacemaker or internal defibrillator. It is recommended that the user keep the ear tips at least an inch away from any pacemaker or internal defibrillator.

We have not had any customers indicate a problem using TV Ears in the presence of a pacemaker or internal defibrillator. We recommend not placing the ear tip ends of the headsets (where the speakers are) on your chest or directly in the vicinity of a pacemaker or defibrillator. If you have concerns, we recommend you contact your physician.

Installation Instructions

Step 1 | Plug in the Audio Cord



For **best results**, plug the audio cord into your television's analog (RCA) audio out ports.

1. Plug the dual end of the audio cord 11 (red and black male plugs) into the analog (RCA) audio out ports on the back of the television. *
2. Plug the single end of the audio cord into the port labeled 'Audio' on the back of the TV Ears transmitter.

***If audio out ports are not available on the back of your television:** use the audio out ports on your cable or satellite box.

***If outside the U.S and audio out ports are not available on the back of your television:** use a SCART to RCA signal out adapter.

To use a DVD player or VCR when the audio cord is plugged into a cable or satellite box:

1. Take the dual end of the audio cord 11 (red and black male plugs); gently pull apart the red and black plugs.
2. Insert the red plug into the analog (RCA) audio out port of the cable or satellite box.
3. Insert the black plug into the analog (RCA) audio out port of the DVD player or VCR.
4. Plug the single end of the audio cord into the audio port labeled 'Audio' on the back of the TV Ears transmitter.

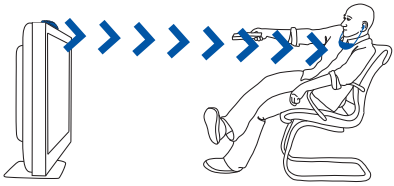
When installed this way, you must turn off whichever device is not in use. Turn off the cable/satellite box when watching a DVD or video. Turn off the DVD/VCR player when watching TV.

Installation Instructions

Installation Tips:

- Ports on the front of TVs are usually audio in ports and will not send sound to your TV Ears.
- Fixed/Variable audio setting: See the Troubleshooting Guide on page 15.
- TV Ears does not work with digital audio out ports without the TV Ears DAC (Digital Analog Converter). For information on the DAC see page 12.

Power and Place the TV Ears Transmitter | Step 2



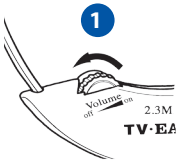
The transmitter lights must be in direct line of sight with the headset.

1. Place the transmitter on a flat surface 3-5 feet off the ground.
2. Point the front of the transmitter towards the seating area where the headset will be used. Plug the end of the AC adapter (10) into the port labeled '12V' on the back of the transmitter.
3. Plug the AC adapter into a standard electrical outlet or surge protector.

Note: The transmitter must remain plugged-in to charge the headset and transmit the infrared signal.

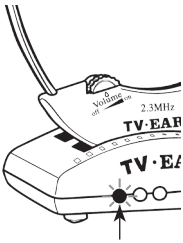
Installation Instructions

Step 3 | Charging the Headset



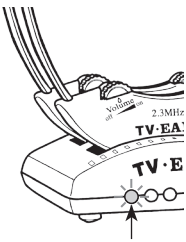
The headset comes pre-charged with enough battery power for 10 minutes of use. The headset will last up to 10 hours on a full charge, depending on volume level. A fully exhausted battery will take between 8-10 hours to charge completely. The automatic 1-hour "Quick Charge" feature will rapidly charge a partially drained battery sufficiently for typical use, 2-4 hours.

1. Turn the headset OFF by rotating the VOLUME dial (1), reducing the volume until you feel or hear a click.
2. Place the headset in the charging cradle of the transmitter facing forward.
3. Check to see that the charging light (6) illuminates. The light will glow green if the headset is placed in (7) the front charging cradle of the transmitter, red if placed in rear cradle, and amber if a headset is placed in each cradle.



GREEN
Front Cradle

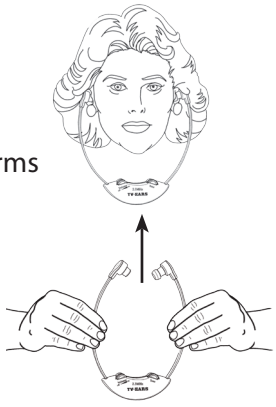
RED
Rear Cradle



AMBER
Two Headests

TV Ears recommends storing the headset in the charging cradle of the transmitter when not in use.

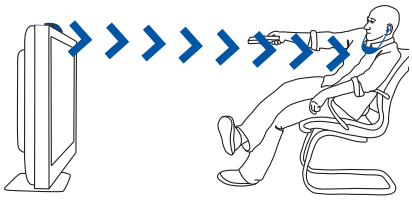
Using the Headset | Step 1

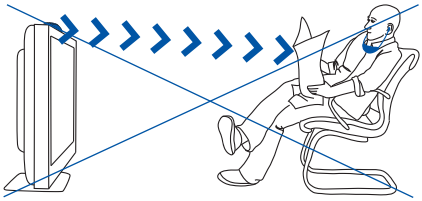


The writing on the front of the headset should face away from your body. The infrared signal is received on the front of the headset.

1. Using both hands, gently separate the bow arms and place earpieces into each ear (similar to placing a stethoscope).
2. The VOLUME control (1) will be located on the RIGHT side. Rotate the dial to turn ON the headset and set the volume to your comfort level.
3. The TONE control (2) (bass and treble) will be located on the LEFT side. Rotate the dial to adjust the tone to your preference.

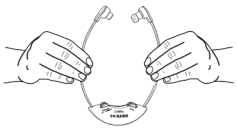
The TV Ears headset receives an invisible infrared light signal from the transmitter. The infrared signal cannot pass through walls or solid objects, so make sure the headset has a clear line of sight to the transmitter. The headset can only pick up the infrared signal in the same room as the transmitter.





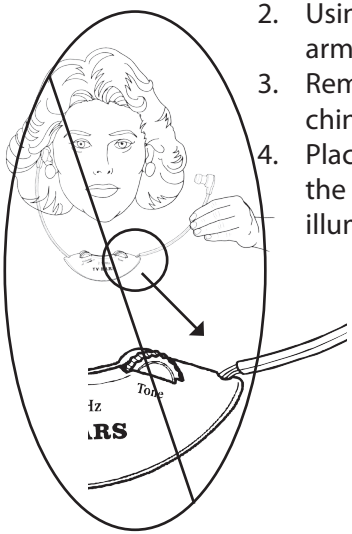
Using the System

Step 2 | Removing Headset After Use



Always use two hands to place and remove your headset from your ears. Using one hand may loosen or tug on the bow arms and damage your headset.

1. Turn the headset OFF by rotating the VOLUME dial (1), reducing the volume until you feel or hear a click.
2. Using both hands, gently separate the bow arms from your ears.
3. Remove the headset by lowering it under your chin.
4. Place the headset into the charging cradle of the transmitter, make sure the charging light illuminates.

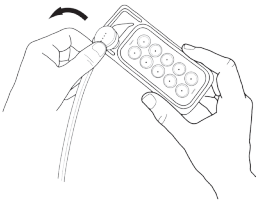


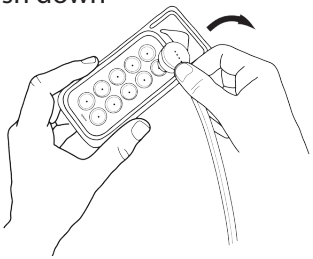
Maintenance

Ear Tips:
Your headset comes with foam TV Ears Tips 3 attached. Some users may prefer using our Silicone Ear Tips. The foam ear tips must be used with black snap tip adapters; the silicone ear tips do not use snap tip adapters. Ear tips can be purchased from TV Ears customer service.

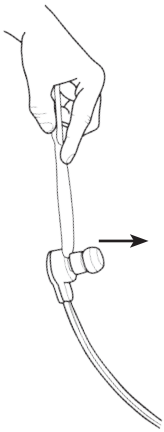
Replacing the foam TV Ears Tips with new foam TV Ears Tips:
Note: Depending on usage, TV Ears Tips will become dirty and frayed. Replace TV Ears Tips if they are soiled or show signs of wear. Do not attempt to re-attach or reuse ear tips after they have become detached. For safety purposes, we recommend replacing TV Ears Tips every 30-60 days.

1. Use the top portion of the TV Ears Tips package to remove the ear tip from the headset. Place the ear tip into the triangular cutout of the package.
2. Slide the ear tip to a corner and gently pull the ear tip off. The black snap tip adapter should remain on the headset.
3. If a white o-ring remains on the tip of the snap tip adapter, remove it before attempting to install a new ear tip.
4. Open the package of ear tips and place it on a level surface.
5. Place the pointed end of the snap tip adapter into the center hole of the new ear tip and push down until you feel the new ear tip snap on.
6. Gently pull the headset away from the tray.
7. Repeat to replace the other ear tip if necessary.





Maintenance



Replacing the foam TV Ear Tips with the Silicone Ear Tips:

Note: Depending on usage, silicone ear tips will become discolored and dirty with use. For cleanliness, wash the silicone ear tips with mild soap and warm water every 30 days. We recommend replacing silicone ear tips at least every 6 months or as needed.

1. If you have the foam TV Ears Tips installed on your headset and are replacing them with the silicone ear tips, remove the black snap tips adapters. To remove the snap tip adapters, you will need something with a flat edge such as a butter knife or a spoon.
2. Place your flat object in the gap between the snap tip adapter and the headset. Gently force the snap tip adapter off the headset.
3. Once the foam ear tips and snap tip adapters are removed from the headset, place each silicone ear tip directly onto the tip of the headset where the snap tip adapter was initially located.

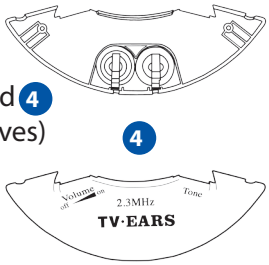
Replacing the Silicone Ear Tips with foam TV Ears Tips:

Heed all above warnings and notes about foam TV Ears Tips and Silicone Ear Tips.

1. If you are already using silicone ear tips, remove them prior to installing TV Ears Tips. They will easily pull off the headset.
2. Install the snap tip adapters by gently twisting them onto the ends of the headset.
3. Follow steps 4-7 on the page 8 to install foam TV Ears Tips.

Maintenance

Batteries:
Batteries will last up to 1-2 years depending on usage. If you notice reduced sound and range it may be time to replace the battery. Only use batteries purchased from TV Ears. Be sure to purchase the same model battery as the headset you own.



To replace the batteries, you will need:

- New faceplate with TV Ears batteries installed (can be purchased from TV Ears representatives)
- TV Ears headset
- Small #1 Phillips head screwdriver

Replacement Instructions:
If you are uncomfortable or have trouble replacing the battery yourself, contact TV Ears customer service.

1. Turn the headset OFF.
2. Place the headset on a level surface, front side down.
3. Using the small #1 Phillips head screwdriver, remove the two screws on the back of the headset next to each bow arm.
4. Turn the headset over and remove the faceplate with the TV Ears logo.
5. Place the new faceplate with batteries on the headset and turn the headset over.
6. Gently put the screws in place and attach the new faceplate with the screw driver.
7. Place the headset on the transmitter - charging cradle and allow your TV Ears to charge for the full 8-10 hours.

Note: The supplied rechargeable batteries can be recycled. In order to protect the environment, only dispose of exhausted rechargeable batteries at a recycling facility. Do not dispose of batteries in trash.

Repairs, Accessories, & Replacements

Before sending in your TV Ears products for repair, please call our customer service representatives for troubleshooting assistance. If we are unable to resolve the problem or if the product needs to be repaired a Return Merchandise Authorization (RMA) number will be issued. RMA numbers allow TV Ears to keep track of your product and return it to you quickly. All returned items must have an RMA number.

Obtain an RMA number by calling TV Ears Customer Service:

- US: 1-866-611-9934
- US Corporate Office Toll Free: 1-888-883-3277
  Monday - Friday 7:00 AM - 4:00 PM PST
- Canada: 1-800-263-4864
- European: 00353-61-77-0807
- UK: 0844-202-4000

Accessories and Replacements can be purchased online, by telephone, or purchased from an Authorized TV Ears dealer.

- **Online: www.tvears.com**
- **Call Customer Service at the appropriate number above.**
- **Visit a local Authorized TV Ears Dealer:**
  To find a TV Ears dealer near you, go to the TV Ears website at **www.tvears.com**. Please call the dealer to confirm the desired item is in stock.

Additional Accessories & Replacement Parts

Additional accessories and replacement parts can be purchased to expand your TV Ears system.

Additional Headset: The transmitter is designed to hold and charge two headsets at a time. The transmitter can send the signal to more than two headsets at a time. Additional headsets of the same model can be used when more than one household member wants to use TV Ears.

Seat Side Charger: This charger keeps your headset charged right next to your seating area. The charger does not transmit an infrared signal.

Foam TV Ears Tips 3 : This is a pack of 10 replacement ear tips. Replace TV Ears Tips if they are soiled or show signs of wear. Discard ear tips after they are detached; do not re-attach. For safety purposes, we recommend changing TV Ears Tips every 30-60 days.

Silicone Ear Tips: These are sold as a pair or in a pack of 10 individual ear tips. For cleanliness wash the silicone ear tips with mild soap and warm water at least every 30 days. We recommend replacing silicone ear tips every 6 months or as needed.

TV Ears Replacement Battery 4 : TV Ears batteries are designed to last 1-2 years depending on usage. Only use batteries purchased from TV Ears.

Alternate Installation Kit: This kit includes a power microphone, extender cord, and headphone jack adapter. This kit can be used if you cannot access or there is no analog (RCA) audio out ports on your television, satelite box, or cable box.

DAC (Digital Analog Converter): This converter allows you to connect your TV Ears transmitter to a digital audio out port when analog audio out ports are not available.

Frequently Asked Questions (FAQ's)

1. How do TV Ears work?
TV Ears has infrared lights on the front of the transmitter which sends an infrared signal to the receiver in the front of the headset.

2. Why is the sound so clear?
TV Ears Voice Clarifying Circuitry takes the sound of the television and enhances the speech frequencies above the background noise, so the dialog is more clear.

3. Why do my TV Ears mute when I mute the TV?
When the TV is set to a 'Variable' audio out setting, the volume of the TV Ears headset will change as the volume of the TV changes. A fixed audio out will allow the television volume and TV Ears volume to work independently from one another. Some televisions have to be manually switched from the 'Variable' audio setting to the 'Fixed' audio setting by using your TV menu. Not all TVs have the ability to switch from a variable to a fixed audio out (consult your television manual or manufacturer).

4. Why do I hear a television station when I'm watching a DVD/video?
When the audio cord is plugged into the analog (RCA) audio out port of a cable or satellite box AND an analog (RCA) audio out port of a DVD player or VCR, you must turn off whichever device is not in use.
See Step 1 of installation for further instructions.

5. How do I charge the headset?
Turn the headset off and gently place into the charging cradle of the transmitter. Be sure the charging light illuminates.
See Step 3 of Installation for further instructions.

6. How do I know the headset is charging?
The charging light will be green when the headset is placed in the front charging cradle of the transmitter and red if the headset is placed in the rear - charging cradle of the transmitter. If there are two headsets charging at the same time, the light will appear amber.

7. Will the lights change colors once the headset is fully charged?
No, the charging light will remain a constant color as long as a headset is placed in the charging cradle.

FAQ's continued on next page

Frequently Asked Questions (FAQ's)

8. Why is the charging light off?
Once the headset is removed from the transmitter, the charging light will no longer be illuminated. If the charging light does not illuminate when the headset is in either charging cradle, pick up the headset and replace it in the charging cradle (it should rock into place). For further assistance, see the Troubleshooting Guide.

9. Can I over charge the headset/batteries?
No, the battery will not over charge if left in the charging cradle of the transmitter.

10. What is the lifetime of the batteries?
The rechargeable batteries are designed to last between 1-2 years depending on usage.

11. How do I get new batteries or ear tips?
TV Ears replacement batteries and ear tips are sold through TV Ears online, by phone, or from an Authorized TV Ears Dealer.

12. What does 2.3MHz mean?
2.3MHz is the frequency of the infrared signal that is sent by the transmitter to the headset. Infrared signals are invisible light signals and are not disturbed by electrical storms.

For additional technical questions, consult our Troubleshooting Guide on the next page.

If you have further questions please call one of the customer service numbers or visit our website.

Troubleshooting Guide

Problem:	Check the Following:
You hear static or interference.	• The audio cord is completely plugged into an analog (RCA) audio OUT port of the audio source. • The audio cord is NOT plugged into a digital audio out port, unless using a DAC. • The transmitter is plugged into a working power outlet. • The audio cord is plugged into the audio port of the transmitter completely. • The infrared lights of the transmitter are facing the headset and are illuminated. • The transmitter is 3-5 feet off the ground. • Be sure that the headset model matches the transmitter model. For example, you must use a 2.3 headset with a 2.3 transmitter. • Cover all large windows.
The lights on front of transmitter do not light up.	• Cup your hand over the lights and see if the infrared lights are glowing red. • Make sure that the AC power adapter is completely plugged into a power outlet and the 12V port on back of the transmitter.
The charging light does not come on when headset is in the cradle.	• Remove and replace headset to realign in the charging cradle. • Use your fingertips to gently rock the headset left to right, making sure the headset is sitting properly in the charging cradle. • Make sure that the AC power adapter is completely plugged into a power outlet and the 12V port on back of the transmitter. See step 3 of the Installation.

Troubleshooting Guide

Problem	Check the Following
The TV volume does not work independently from TV Ears volume.	• Make sure the audio cord is in a fixed audio out port and the television is set on fixed audio out settings. See Question 3 of FAQs.
You hear a television station when you watch a DVD or video.	• Turn the cable or satellite box off when you watch a DVD or video. See Question 4 of FAQs. **Note:** This is only if audio cord is plugged into audio out port of a cable or satellite and DVD or VCR player.
You have a Blu-Ray player.	• Hook a Blu-Ray player up the same way you would a DVD or VCR. See Step 1 of Installation.
You have a Digital Converter Box or similar.	• Hook a Digital Converter Box or similar up the same way you would a cable or satellite box. See Step 1 of Installation.

Specifications

System

Modulation	Infrared, Mono
Carrier frequencies	2.3MHz
Range	600 sq. ft (55 m^2)
Audio frequency response	100-16,000 Hz
THD (Total Harmonic Distortion)	< 1%
Signal to Noise Ratio	70 dB

Headset

Max SPL (Sound Pressure Level)	120 dB
Power Supply	NiMH (Nickel Metal Hydride) rechargeable battery
Operating Time	up to 10 hours (depending on use)
Weight	1.6 oz (45g)
Height	7.75 in (19.7 cm)

Transmitter

Audio / Microphone connection	Mini headphone/RCA cable/ Microphone
Power Supply	DC Power Supply 12v, 200mA
Weight	3 oz (85g)
Dimensions (H x W x D)	1.4" x 4.12" x 3.4" (3.6cm x 10.5cm x 8.6cm)

Manufacturer Declaration

Warranty - 90 Days from date of purchase
For a period of 90 days from the date of purchase, TV Ears warranties this product against defects in material and workmanship. The TV Ears headset, transmitter, and all parts (excluding the disposable TV Ears Tips) are under warranty and will be replaced or repaired at no charge to the owner. The proof of purchase (POP) is required at the time of return.

Repairs or alterations performed by non-authorized TV Ears representatives will void the warranty and may damage the equipment.

This warranty is provided at the discretion of TV Ears, Inc. and does not cover cosmetic damage or damage due to acts of nature, accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the product.

Returns & Repairs
TV Ears provides repair service for the life of the product. A nominal fee may be applied. Proof of purchase is required for claims within the warranty period.

TV Ears Declaration
All content, marks, and brand logos are property of TV•EARS® Inc. TV•EARS® Inc. reserves the right to change product content and product specifications without notice.

CE Declaration of Conformity
TV Ears is in compliance with the essential safety requirements and other relevant provisions of Standard IEC 60065:2001 + Ammd 1:2005 / EN 60065:2002 and Directive 2004/108/EC; 2006/95/EC, 89/336/EEC, 92/31/EC, 93/68/EEC.

CE

Manufacturer Declaration

Rechargeable Batteries

The supplied rechargeable batteries can be recycled. In order to protect the environment, only dispose of exhausted rechargeable batteries at a proper recycling facility. Do not dispose of batteries in trash.

WEEE Declaration

TV Ears products are developed and manufactured with high-quality materials and components that can be recycled and/or reused. Please dispose of this product by bringing it to your local collection point or recycling center for such equipment.

Toll Free Help Line
1-888-883-3277
To learn more:
www.tvears.com

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